



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,432	01/30/2004	Frank A. Hunleth	0320-001	8731

42015 7590 03/21/2007
POTOMAC PATENT GROUP, PLLC
P. O. BOX 270
FREDERICKSBURG, VA 22404

EXAMINER

ORR, HENRY W

ART UNIT	PAPER NUMBER
----------	--------------

2176

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/768,432

Applicant(s)

HUNLETH ET AL.

Examiner

Henry Orr

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,6-9,11,12,31,36,37 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4, 5, 10, 13-30, 32-35, 38-40 and 42-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :11/10/2004, 1/12/2006, 3/15/2006.

DETAILED ACTION

1. This action is responsive to application communication filed on 1/30/2004.
2. Claims 1, 4, 5, 10, 13-30, 32-35, 38-40 and 42-46 are pending in the case.
Claims 1, 10, 21 and 34 are independent claims.

Priority

3. Applicant's claim for the benefits of U.S. provisional application #60/468,830, filed May 8, 2003 and U.S. provisional application #60/495,998 filed August 18, 2003 under 35 U.S.C. 119(e) are acknowledged.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 11/10/2004, 1/12/2006 and 3/15/2006 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statements.

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:
 - a) Ref. # 102 and 510 in Figure 2
 - b) Ref. # 514 in Figure 6

Art Unit: 2176

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

a) On p. 22 par. 43, ref.# 538

b) On p. 45 par. 79, ref.# 1900

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are

Art Unit: 2176

not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:

- a) On p. 13 par. 31, "I/O control device 134" should be "I/O control device 226".
- b) On p. 13 par. 31, "entertainment system 100" should be "entertainment system 200".
- c) On p.26 par. 49, "children nodes 904" and "display device 904" has the same reference number.

Appropriate corrections are required.

Claim Objections

7. Claims 16, 25 and 37 are objected to because of the following informalities:

- a) Claim 16 is a duplicate of claim 15.
- b) Claim 25 is improperly depending on cancelled claim 12. For examination purposes, claim 25 is considered to depend on claim 21.
- c) Claim 37 is missing from the application. It is not clear as to whether claim 37 is cancelled. For examination purposes, claim 37 is withdrawn from consideration.

Appropriate corrections are required.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. **Claims 10 and 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 10 recites the phrase “**a graphical user interface**”. There is insufficient antecedent basis for this limitation in the claim because it is unclear whether “**a graphical user interface**” in line 5 of claim 10 is referring to previously recited “**a graphical user interface**” in line 3 of claim 10.

Dependent claims 13-20 are rejected for fully incorporating the deficiencies of their respective base claims.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Art Unit: 2176

11. Claims 1, 4, 5, 10, 13-27, 29, 30, 32-35, 38-40 and 42-46 are rejected under 35 U.S.C. 102(e) as being anticipated by Daily et al. (hereafter referred to as Daily), U.S. Publication Application #2004/0123320 A1.

Regarding claims 1, 4 and 5, Daily teaches **“providing an interactive guide for television program selection which allows a user to perform various operations such as panning and zooming through iconic and native format representations of media sources and selecting media sources for playback” (par. 2).** (claim 1; i.e., means for organizing said media items; means for selecting one of a plurality of different semantic levels associated with said one of said media items; means for launching said one of said media items at said selected one of said plurality of different semantic levels.) Examiner interprets the wireless remote controls as the means for selecting one of a plurality of different semantic levels associated with the media sources (“media items”) (par. 40-42)(par. 48).

Daily also teaches **“gesture recognition devices for recognizing input from a user in the form of a bodily movement, and microphones coupled with voice recognition processors” (par. 48).** (claim 4; i.e., wherein said means for pointing to one of said media item includes a voice recognition unit.) (claim 1; i.e., means for pointing to one of said media items, wherein said means for pointing to one of said media items includes a three dimensional (3D) pointer;) (claim 5; i.e., wherein said means for pointing to one of said media items includes a gesture recognition unit.) Examiner interprets the gesture devices to anticipate 3D pointers because the bodily

gesture movement used to point the input device encompasses three or more dimensions in air in front of the television display screen (par. 48).

Regarding claim 10, Daily's **Figure 4 illustrates a display screen and an input device, which include gesture devices capable of performing the limitations as recited in claim 10 (par. 48).** (claim 10; i.e., a display screen for displaying graphical user interface objects; an input device for providing user input to a graphical user interface, wherein said input device includes a 3D pointer;) Examiner interprets the gesture devices to anticipate input devices such as 3D pointers because the bodily gesture movement of a user is translated by the gesture recognition unit while the gesture input device is freely moving in three or more dimensions in space (par. 48).

Daily's **Figure 1 illustrates a graphical user interface capable of performing the limitations of the graphical user interface** as cited in the limitation of claim 10. (claim 10; i.e., a graphical user interface for coordinating display of said graphical user interface objects on said display screen)

Daily also teaches **a means for detecting (par. 50, par. 59), a means for zooming (par. 54-55), a means for selecting (par. 57), a means for moving a selection target (par. 56), and a means for initiating an action (par. 59)** as cited in the limitations of claim 10. (claim 10; i.e., means for detecting when a position indicated on the screen by said input device is stationary for a predetermined period of time and to display additional images and/or text on the screen in response thereto; means for zooming from one image scope to another image scope based on first input from said input device; means for selecting one of said graphical user interface objects based on

second input from said input device; means for moving a selection target through a list of screen positions based on third input from said input device; and means for initiating an action in said graphical user interface framework based on said indicated position and fourth input from said input device.)

Regarding claim 13, Daily teaches **“a touchpad 408 that allows a user to control” (par. 49).** (claim 13; i.e., wherein the input device includes a touchpad).

Regarding claim 14, Daily teaches **“a television remote control 410” (par. 14).** (claim 14; i.e., wherein the input device includes a television remote control device).

Regarding claims 15 and 16, Daily teaches **“gesture may be used to perform the pre-selection” (par. 59).** (claim 15; i.e., wherein at least one of said first, second, third and forth inputs is a gesture) (claim 16; i.e., wherein at least one of said first, second, third and forth inputs is a gesture) Examiner interprets the pre-selection as the second input.

Regarding claim 17, Daily teaches **“touch pad, the user may control the level of zooming by moving their fingers across the touch pad” (par. 54).** (claim 17; i.e., wherein the means for moving a selection target includes a touchpad and said third input is a movement on said touchpad.) Examiner interprets the touchpad to be capable of selecting a target (par. 57).

Regarding claim 18, Daily teaches **“Preliminary selection can provide a user with a preview of the media content, and can be performed, for example, by moving a cursor over a particular icon or by an explicit pre-selection command, for example, a specific button, vocal command, or gesture may be used to**

perform the pre-selection” (par. 59). (claim 18; i.e., wherein said means for displaying additional images and/or text further comprises means for receiving a gesture input associated with a hover function.) Examiner interprets moving a cursor over a particular icon as the hover function.

Regarding claim 19, Daily teaches **“The speech recognition component can use standard speech recognition technologies to incorporate a dynamic, customizable language and grammar to allow a user to provide spoken commands to the interactive guide. Preferably, simple and easy-to-use phrases such as “go back”, “pick”, “zoom view”, “pan screen” may be used” (par. 42).** (claim 19; i.e., wherein said first input of said means for zooming is one of a gesture or a speech command.) Examiner interprets the phrase “zoom view” to be a speech input command.

Regarding claim 20, Daily teaches **“a television to generate the display” (par. 49).** (claim 20; i.e., wherein the display screen is a television.)

Regarding claim 21, Daily’s **Figure 4 illustrates a television and mouse with a scroll wheel capable of performing the scroll primitive** as cited in claim 21. (claim 21; i.e., a television having a display screen; a first one of said primitives is a scroll primitive, such that said controller scrolls media content displayed on said display screen of said television responsive to a first input from said pointing device;)

Daily’s **Figure 3 illustrates the media system controller capable of performing the limitations of claim 21.** (claim 21; i.e., a system controller for receiving said input and controlling media content displayed on said display screen based on said

input, wherein said system controller includes memory for storing software code associated with primitives for controlling said media content display)

Daily also teaches **“preliminary selection can provide a user with a preview of the media content, and can be performed, for example, by moving a cursor over a particular icon” (par. 59).** (claim 21; i.e., a second one of said primitives is a hover primitive, such that said system controller alters a display of said media content displayed on said display screen of said television when said cursor hovers over a portion of said display screen for a predetermined period of time.) Examiner interprets the preliminary selection to involve the hover primitive to preview the media content of a particular icon.

Daily further teaches **“gesture recognition devices for recognizing input from a user in the form of a bodily movement” (par. 48).** (claim 21; i.e., a 3D pointing device for providing input to said television, said input based, at least in part, on movement of said 3D pointing device;) Examiner interprets the gesture devices to anticipate input devices such as 3D pointers because the bodily movement of a user using a gesture device is in three or more dimensions in space (par. 48).

Regarding claim 22, Daily teaches **“gesture may be used to perform the pre-selection” (par. 59).** (claim 22; i.e., wherein a third one of said primitives is a point primitive which generates a cursor on said display screen of said television, a position of said cursor being based on movement of said 3D point device.) Examiner interprets the gesture to come from a gesture device, which involves at three or more dimensions in space bodily movements to use the gesture device (par. 48).

Regarding claim 23, Daily teaches **“The navigation interface supports various gesturing devices with many buttons (or none) including wireless or corded mice, wireless pointers, and other devices that otherwise simulate two or three button mice” (par. 42).** (claim 23; i.e., wherein said 3D pointing device has at least one button and wherein one of said primitives is a click primitive which indicates actuation of said at least one button.) Examiner interprets the gesturing device as a 3D pointing device.

Regarding claim 24, Daily’s **Figure 4 illustrates a mouse with a scroll wheel.** (claim 24; i.e., wherein said 3D pointing device includes a scroll wheel.) Examiner considers mice with three buttons or two buttons with scroll wheel as 3D pointing devices.

Regarding claims 25-27, Daily teaches **“If a zoom-in command is received, the display is adjusted to show more detail 706” (par. 54).** (claim 25; i.e., wherein said system controller alters said display of said media content by magnifying media content associated with said portion of said display screen.) (claim 26; i.e., wherein a third one of said primitives is a zoom primitive, such that said system controller changes a magnification of said media content displayed on said display screen of said television based on a second input from said 3D pointing device.) (claim 27; i.e., wherein said change in said magnification includes changing from a first magnification level to a second magnification level, wherein information is visible at said second magnification level that was not visible or appropriate at said first magnification level.) Examiner interprets zooming in more detail as equivalent to magnifying detail on the second zoom level that wasn’t visible on the first zoom level.

Regarding claim 29, Daily teaches **"touchpad-based remote control 406 which provides the user with a set of buttons as well as a touchpad 408"**. (claim 29; i.e., wherein the 3D pointing device includes a touchpad.) Examiner interprets the touchpad-based remote control as anticipating the 3D point device including a touch pad because the gesturing device contains buttons to serve as a remote control. Therefore, the touchpad-based remote control would clearly anticipate including a touchpad to the gesturing device ("3D point device") remote control as recited in claim 29.

Regarding claim 30, Daily teaches **"Navigation control may be provided by several possible means, preferably through the use of a traditional remote control. The user may use various combinations of buttons and gestures or spoken language to signify a desired command, depending on the device used for user input. The navigation interface supports various gesturing devices with many buttons (or none) including wireless or corded mice, wireless pointers"**(par. 42). (claim 30; i.e., wherein the 3D pointing device includes a television remote control device.) Examiner interprets the gesturing devices ("3D pointing device") as capable of being used as a traditional remote control because the gesturing devices contain buttons for signifying commands to the television.

Regarding claim 32, Daily teaches **"The speech recognition component can use standard speech recognition technologies to incorporate a dynamic, customizable language and grammar to allow a user to provide spoken commands to the interactive guide. Preferably, simple and easy-to-use phrases such as "go back", "pick", "zoom view", "pan screen" may be used"** (par. 42).

Art Unit: 2176

(claim 32; i.e., wherein at least one of said scroll primitive and said hover primitive are actuated in response to a speech command.) Examiner interprets the phrase "pan screen" as a speech command to actuate the scroll primitive.

Regarding claim 33, Daily teaches **"By allowing the use of pointing and speaking, a user could, for example, simply move the cursor over media and say, "play this" or "take me there" (par. 43).** (claim 33; i.e., wherein at least one of said scroll primitive and said hover primitive are actuated in response to a gesture) Examiner interprets the user moving the cursor over the media as a gesture that actuate the hover primitive.

Claims **34, 35, and 46** are system claims and are substantially encompassed in system claim 21 respectively; therefore the system claims are rejected under the same rationale as system claim 21 above.

Claims **38, 39, 40, 42, 43, 44 and 45** are system claims and are substantially encompassed in system claims 22, 23, 24, 26, 27, 32 and 33 respectively; therefore the system claims are rejected under the same rationale as system claims 22, 23, 24, 26, 27, 32 and 33 above.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daily as cited above in view of Butler, U.S. Patent #6,154,199.

Regarding claim 28, Daily does not expressly teach a 3D pointing device including a trackball. However, Butler teaches **“a hand positioned mouse and more particularly to a glove like article having a tracking ball positioned to be operated by the thumb with switch functions or buttons positioned on the palm of the hand” (col. 2 lines 31-35).** (claim 28; i.e., wherein the 3D pointing device includes a trackball.) Examiner interprets the hand positioned mouse as a 3D pointing device because the movement of the hand in three or more dimensions can be translated to control a cursor (Butler; col. 1 lines 42-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the gesture device (“3D pointing device”) as taught by Daily to include a track ball as taught by Butler to provide the benefit of saving time and producing efficient means of simultaneous cursor control and typing. (Butler; col. 1 lines 42-50)

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Orr whose telephone number is (571) 270 1308. The examiner can normally be reached on Monday thru Friday 8 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on (571) 272-4136. The fax phone

Art Unit: 2176

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

3/12/2007
HO


Heather R. Herndon
Supervisory Patent Examiner
Technology Center 2100